

development vehicles) in lieu of building a new test vehicle providing that the modification will not impact the representativeness of the vehicle's test results. Manufacturers shall use good engineering judgment in making such determinations. Development vehicles which were used to develop the calibration selected for emission data testing may not be used as the EDV for that configuration. Vehicles from outside the durability group may be altered with advance approval of the Administrator.

(3) Components used to reconfigure EDV's under the provisions of paragraph (c)(2) of this section must be appropriately aged if necessary to achieve representative emission results. Manufacturers must determine the need for component aging and the type and amount of aging required using good engineering judgment.

(4) Bench-aged hardware may be installed on an EDV for emission testing as a method of determining certification levels (projected emission levels at full or intermediate useful life) using bench aging procedures under the provisions of § 86.1823.

[64 FR 23925, May 4, 1999, as amended at 71 FR 2836, Jan. 17, 2006]

§ 86.1831-01 Mileage accumulation requirements for test vehicles.

(a) *Durability Data Vehicles.* (1) The manufacturer must accumulate mileage on DDV's using the procedures in § 86.1823.

(2) All tests required by this subpart on durability data vehicles shall be conducted within 250 miles of each of the nominal test point mileage. This ± 250 mile test point mileage tolerance may be modified with the advance approval of the Administrator if the basis for the written request is to prevent an interruption of durability mileage accumulation due to test scheduling conflicts for weekends, holidays, or other similar circumstances.

(b) *Emission data vehicles and running change vehicles.* (1) The standard method of mileage accumulation for emission data vehicles and running change vehicles is mileage accumulation using either the Standard Road Cycle specified in appendix V to this part or the

Durability Driving Schedule specified in appendix IV to this part.

(2) The manufacturer may use an alternative mileage accumulation method providing the form and extent of the service accumulation represents normal driving patterns for that vehicle, the method is consistent with good engineering judgment, and the method is described in the application for certification.

(3) Except with the advance approval of the Administrator, all vehicles will accumulate mileage at a measured curb weight which is within 100 pounds of the estimated curb weight. If the loaded vehicle weight is within 100 pounds of being included in the next higher inertia weight class as specified in § 86.129, the manufacturer may elect to conduct the respective emission tests at higher loaded vehicle weight.

(c) The manufacturer shall determine the mileage at which the emission control system and engine combination is stabilized for emission-data testing. The manufacturer shall provide to the Administrator if requested, a record of the analysis used in making this determination. The manufacturer may elect to accumulate 2,000 miles (3,219 kilometers) or more on each test vehicle without making a determination. The manufacturer must accumulate a minimum of 1,000 miles (1,608 kilometers) on each emission data vehicle.

(d) All test vehicle mileage must be accurately determined, recorded, and reported to the Administrator upon request.

[64 FR 23925, May 4, 1999, as amended at 71 FR 2836, Jan. 17, 2006]

§ 86.1832-01 Optional equipment and air conditioning for test vehicles.

For test vehicles selected under §§ 86.1822-01 and 86.1828-01:

(a)(1) Where it is expected that more than 33 percent of a car line, within a test group, will be equipped with an item (whether that item is standard equipment or an option), the full estimated weight of that item must be included in the curb weight computation for each vehicle available with that item in that car line, within that test group.

(2) Where it is expected that 33 percent or less of the car line, within a

test group, will be equipped with an item (whether that item is standard equipment or an option), no weight for that item will be added in computing the curb weight for any vehicle in that car line, within that test group, unless that item is standard equipment on the vehicle.

(3) In the case of mutually exclusive options, only the weight of the heavier option will be added in computing the curb weight.

(4) Optional equipment weighing less than three pounds per item need not be considered.

(b)(1) Where it is expected that more than 33 percent of a car line, within a test group, will be equipped with an item (whether that item is standard equipment or an option) that can reasonably be expected to influence emissions, then such items must actually be installed (unless excluded under paragraph (b)(2) of this section) on all emission data and durability data vehicles of that car line, within that test group, on which the items are intended to be offered in production. Items that can reasonably be expected to influence emissions include, but are not limited to: air conditioning, power steering, and power brakes.

(2) If the manufacturer determines by test data or engineering evaluation that the actual installation of the optional equipment required by paragraph (b)(1) of this section does not affect the emissions or fuel economy values, the optional equipment need not be installed on the test vehicle.

(3) The weight of the options must be included in the design curb weight and must also be represented in the weight of the test vehicles.

(4) The engineering evaluation, including any test data, used to support the deletion of optional equipment from test vehicles, shall be maintained by the manufacturer and be made available to the Agency upon request by the Administrator within 15 business days.

(c) Except for air conditioning, where it is expected that 33 percent or less of a car line, within a test group, will be equipped with an item (whether that item is standard equipment or an option) that can reasonably be expected to influence emissions, that item may

not be installed on any emission data vehicle or durability data vehicle of that car line within that test group, unless that item is standard equipment on that vehicle or specifically required by the Administrator.

(d) Air conditioning must be installed and operational on any emission data vehicle of any vehicle configuration that is projected to be available with air conditioning regardless of the rate of installation of air conditioning within the car line. Paragraphs (a) through (c) of this section will be used to determine whether the weight of the air conditioner will be included in the equivalent test weight calculations for emission testing.

§ 86.1833-01 Adjustable parameters.

(a) At the time that emission data vehicles are selected for the test fleet, a determination shall be made of those vehicle or engine parameters which will be subject to adjustment for certification, Selective Enforcement Audit and Production Compliance Audit testing, the adequacy of the limits, stops, seals, or other means used to inhibit adjustment, and the resulting physically adjustable ranges for each such parameter. The manufacturer shall use good engineering judgment in making such determinations and shall notify the Administrator of its determinations prior to emission data vehicle testing for the affected test groups (preferably at an annual preview meeting scheduled before the manufacturer begins certification activities for the model year).

(1) *Determining parameters subject to adjustment.* (i) The following parameters may be subject to adjustment: the idle fuel-air mixture parameter on Otto-cycle vehicles; the choke valve action parameter(s) on carbureted, Otto-cycle vehicles (or engines); or any parameter on any vehicle (Otto-cycle or diesel) which is physically capable of being adjusted, may significantly affect emissions, and was not present on the manufacturer's vehicles (or engines) in the previous model year in the same form and function.

(ii) Any other parameters on any vehicle or engine which are physically capable of being adjusted and which may significantly affect emissions may